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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,825	01/26/2004	James A. Mann JR.	DSCK-1246-C1	9085
7590 09/13/2005 LORUSSO LOUD & KELLY LLP 15 RYE STREET, SUITE 312 PEASE INT. TRADESPORT PORTSMOUTH, NH 03801			EXAMINER BLAU, STEPHEN LUTHER	
			ART UNIT 3711	PAPER NUMBER

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/765,825

**Applicant(s)**

MANN ET AL.

**Examiner**

Stephen L. Blau

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure stands objected to because of the following informalities: It is uncertain what the shaded area in figure 5 is.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-43 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 19, and 38 are indefinite in that the terms “conventional square groove” are indefinite. There are a variety of different dimension for grooves. What is conventional to one is not what is conventional to another. The specification did not disclose what is meant by the volume of a conventional square groove (i.e. depth and width). Claim 27 is indefinite in not providing proper antecedent basis for a second surface angle. A first angle had not been previously disclosed. In claim 27 it is uncertain whether one or two angles surface angles are required. Claims 14-18 and 34-37 are indefinite in that these claims claim “the golf **ball**” and the claims they depend on claim “a golf **club**”. In these claims it is uncertain what is being claimed.

4. The argument and changes with respect to claims 33, 37, and 39 are agreed with and the rejections under 35 U.S.C. 112, second paragraph are removed. The change to claim 9 is agreed with and the rejection to claim 11 under 35 U.S.C. 112, second paragraph is removed.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-13, 19-33, and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamatsu in view of Cosby.

Kawamatsu discloses a 4 iron having V groove configuration (Fig. 3B, Col. 3, Lns. 41-47), a centerline spacing being .105 plus or minus .05 inch (Col. 3, Lns. 1-8), a first and second surface angle being 50 degrees, a groove depth being .29 mm (Table 3B, Table 1, Iron 4), a groove width of .7 mm (Table 1, Iron 4), edge spacing being .075 to .2 inches (Col. 3, Lns. 1-8, Table 1), a 5 Iron having a first and second surface angle being 40 degrees (Table 1, 5 Iron, Figs. 3B-3C), an 7 and 8 iron having a U configuration with a planar bottom (Fig. 3C, Col. 3, Lns. 41-47, Table I), a centerline spacing being .105 plus or minus .05 inch (Col. 3, Lns. 1-8), a first and second surface angle being 20 degrees (Fig. 3C, Table 1, Iron 8), a groove depth being .35 mm

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(Table 1, Iron 8), a groove width of .7 mm (Table 1, Iron 8), edge spacing being .075 to .3 inches (Col. 3, Lns. 1-8, Table 1), and irons 3-7 contain reduced volume grooves compared to a 9 and PW iron (Table 1).

Kawamatsu lacks a shaft portion. Cosby discloses a shaft portion attached to a hosel portion (Figs. 1 and 4). In view of the patent of Cosby it would have been obvious to modify the iron head of Kawamatsu to include a shaft portion attached to a hosel portion in order to increase the head velocity when impacting a ball.

7. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galloway.

Galloway discloses a plurality of center grooves having a groove spacing of about 5 to 50 % greater than grooves placed on an outer portion of a face (See enclosure (1)) and a compared wood being a 1 club configuration in the form of a driver (Col. 4, Lns. 40-55).

Galloway does not specifically disclose that the head with the spacing is a driver. Clearly one skilled in the art would have made the head of Galloway a suitable type of club in which a #1 wood of a driver would be included in order to have a long hitting club.

8. Claims 1, 15-16, 18, 19 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimura in view of Molitor.

Nishimura discloses a plurality of center grooves having a concave (cross-section) groove with a center depth about 5-50% less than grooves on an outer portion of a face (Fig. 4b) and a plurality of center grooves having a concave (cross-section) groove with a center depth about 5-

50% more than grooves on an outer portion of a face (Fig. 3b) for hollow heads (Abstract) in order to modify the rigidity of a face and the spin placed on a ball at impact (Col. 4, Lns. 14-34).

Nishimura lacks a club being a 1-9 and PW club and a shaft portion. Molitor discloses a set of irons including a 3-9 and PW iron clubs having a shaft portion (Figs. 5A-5L). In view of the patent of Molitor it would have been obvious to modify the club of Nishimura to include a set of 3-9 and PW irons having shaft portions in order to modify the rigidity of a face and as such the spin placed on a ball at impact for hollow irons clubs.

9. Claims 19 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antonious in view of Horwood.

Antonious discloses increased volume groove configuration (Figs. 2C, 3C) being a plurality of center grooves having a spacing of about 50% less than grooves placed on an outer portion of a face (Fig. 12).

Antonious lacks a shaft and a 9 iron. Horwood discloses a 9 iron club (Col. 4, Lns. 15-30) having a shaft (Fig. 1). In view the patent of Horwood it would have been obvious to modify the club of Antonious to be a nine iron with a shaft in order to utilize the benefits of the head design of Antonious for a nine iron with a shaft.

10. Claims 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamatsu in view of Cosby as applied to claims 1-13, 19-33, and 38 above, and further in view of Gilbert.

Kawamatsu discloses irons 3-5 having a plurality of reduced volume V grooves (Table 1, Third Embodiment, Figs. 3A-3B).

Kawamatsu lacks irons 1-7 having a plurality of reduce volume V grooves. Gilbert discloses a set of 1-7 irons having a plurality of reduce volume V grooves (Figs. 3-4) in order to provide more back spin for short irons (Col. 3, Lns. 23-35). In view of the patent of Gilbert it would have been obvious to modify the set of irons of Kawamatsu to have irons 1-7 having a plurality of reduce volume V grooves in order to have more different long iron clubs to choose from when playing a round of golf and to allow the long and middle irons to advance farther by having less back spin for a golfer who desires more roll of the golfer's long and middle irons.

11. Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamatsu in view of Cosby as applied to claims 1-13, 19-33, and 38-41 above, and further in view of Horwood.

Kawamatsu discloses clubs 8, 9 and a pitching having an increased volume U groove (Figs. 3C-3D).

Kawamatsu lacks a gap wedge and a sand wedge having U grooves. Horwood discloses a set of clubs having a gap wedge in the form of a wedge and a sand wedge (Col. 4, Lns. 15-30). In view of the patent of Horwood it would have been obvious to modify the set of clubs of Kawamatsu to have a gap wedge and a sand wedge having U grooves in order to have more different clubs to choose from when playing a round of golf.

12. Claims 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert in view of Cosby.

Gilbert discloses a set of clubs with a first club is selected from a group consisting of clubs 1-7 having a reduced volume compared to a conventional square groove (Figs. 3-4), a second club selected from a group consisting of 8-9, pitching wedge, gap wedge, and sand wedge having an increased volume groove configuration compared to a conventional square groove (Fig. 5), reduced volume grooves being V grooves (Figs. 3-4), and increased volume grooves being U grooves (Fig. 5).

Gilbert lacks a shaft portion. Cosby discloses a shaft portion attached to a hosel portion (Figs. 1 and 4). In view of the patent of Cosby it would have been obvious to modify the set of iron heads of Gilbert to include a shaft portion attached to a hosel portion in order to increase the head velocity when impacting a ball.

*Allowable Subject Matter*

13. Claims 17, and 37 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. With respect to claim 17, none of the prior art discloses or renders as obvious a plurality of convex grooves having a center groove width of about 5 to 50 % less than grooves placed on an outer portion of a face in addition to the other elements of structure claimed. With respect to claim 37, none of the prior art discloses or renders as obvious a plurality of convex grooves having a center groove width of about 5 to 50 % more than grooves placed on an outer portion of a face in addition to the other elements of structure claimed.



*Response to Arguments*

14. The argument that claims 1, 19 and 38 have been amended to clarify that a square groove has sides perpendicular to the face and as such overcomes the indefiniteness of the claims is disagreed with. The applicant's groove volume is being compared to a conventional groove volume yet it is uncertain what a conventional square groove volume is. It is uncertain what the groove depth and width for a conventional square groove. The market place has all sort of different groove sizes. The argument that claim 27 is not indefinite in that the second surface angle is properly introduced for the first time in claim 27 is disagreed with. A first surface angle has not yet been introduced. It is uncertain in claim 27 if there is one surface angle or two. The argument that claims 14-18 and 34-37 are not indefinite in that a ball is not claimed is disagreed with. In these claims the first three words are "The golf ball". The argument that it is improper to use an official notice is noted and as such the reference of Cosby is being used to show that it is known to attach a shaft portion to a hosel portion. The argument that the reference of Galloway is improper and such a declaration of how one skilled in the art would know this without a reference teaching to this effect or provide a reference is disagreed with. Galloway contains all the elements of structure as claimed and such the examiner believes the rejection is sufficient to reject the claims. As such no declaration or reference will be provided. The argument that Nishimura in view of Molitor is improper since Nishimura discusses grooves to effect rigidity of a hollow club and not as taught by the applicant is disagreed with. As long as the structure is the same it is irrelevant as to the purpose of the structure. The argument that it is

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improper to use the reference of Antonious in view of Horwood since the combination fails to teach or motivate one skilled in the art to produce the claimed invention is disagreed with.

Antonious discloses increased groove configurations and spacing as claimed. Since the dimensions of what is considered a conventional groove configuration is not disclosed in the application it is uncertain what the volume would be.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (571) 272-4406.

The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the

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examiner is unavailable you can contact his supervisor Greg Vidovich whose telephone number is (571) 272-4415. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-3700. (TC 3700 Official Fax 571-273-8300)

slb/ 9 September 2005



**STEPHEN BLAU**  
**PRIMARY EXAMINER**